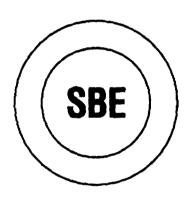


DEC -1 <sub>1997</sub>

PEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

# Comments of the Society of Broadcast Engineers, Inc.

ET Docket 97-214 MSS Access to the 455-456 MHz BAS Band



December 1, 1997

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SOCIETY OF BROADCAST ENGINEERS, INC.

Indianapolis, Indiana

No. of Comies region X

# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

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In the Matter of	)	
	)	
Amendment of Part 2 of the	)	ET Docket No. 97-214
Commission's Rules to Allocate the	)	
455-456 MHz and 459-460 MHz Bands	)	
to the Mobile-Satellite Services	)	

To: The Commission

### Comments of the Society of Broadcast Engineers, Inc.

The Society of Broadcast Engineers, Incorporated (SBE), the national association of broadcast engineers and technical communications professionals, with more than 5,000 members in the United States, hereby respectfully submits its comments in the above-captioned Notice of Proposed Rulemaking ("NPRM") relating to allocation of 455–456 MHz frequencies to the Mobile-Satellite Service ("MSS").

### I. Background Information and SBE Qualifications to Comment

- 1. In 1976, the Commission revised Subpart D of Part 74 of the FCC Rules governing the 450–451 and 455–456 Broadcast Auxiliary Service ("BAS") remote pickup ("RPU") bands, moving from only twenty 100 kHz wide channels to an array of 50, 25 and 10 kHz wide channels. These channels were specified for a range of uses covering RPU stations, available for emergency communications, program material for re-broadcasts ("remotes"), operational communications such as cues and orders, and for telemetry. The Southern California Frequency Coordinating Committee ("SCFCC") was founded shortly thereafter. Its initial goal was to mediate competition for these "new" channels. It rapidly learned that even with the benefits of 25 kHz spacing for some applications, there were still more users than channels.
- 2. In 1980 SCFCC was granted an FCC waiver to allow the splitting of existing RPU channels under the SCFCC band-split plan. This was the first waiver of its kind granted to any database/coordination entity under Part 74 of the FCC rules. SCFCC rapidly became the template for many Part 74 volunteer coordination efforts. The following points were covered in the June 25, 1980, letter from Mr. William Tricarico, Secretary of the FCC, to SCFCC:

- 2a. Acknowledgment of the significant rise of Part 74 activity that went well beyond the provisions of the FCC's 1976 re-write of Part 74.
- 2b. The SCFCC had been active since 1976 to solve coordination problems, and the waiver request was an important part of a carefully crafted plan.
- 2c. The SCFCC Plan was capable of yielding practical results which might be applicable to other parts of the country to alleviate frequency congestion problems.
- 3. The letter requested that SCFCC file a report on its plan with the Commission after one year of operation under the waiver. Such a report was compiled and timely filed on September 15, 1981. Radio and TV stations in more and more markets began to experience coordination growing pains as demands for RPU spectrum increased. Broadcast engineers tasked with making systems work had to find ways to accommodate far more users than there were available channels. Local volunteer services such as database administration and facilitation of the coordination process evolved out of this need, and out of the tradition of engineer-to-engineer cooperation. There was little or no formal financial or support from station licensees. By 1980, SBE National and its Chapters began to support this growing volunteer effort and radio and television broadcast station licensees themselves began to face these growing challenges. This support comes in many forms today:
  - 3a. A person responsible to the SBE Board designated as the official contact point for all bona fide database and coordination entities. This person also is responsible for identifying new coordination/database entities and replacing entities as required by attrition. A list, published quarterly, of SBE-supported and affiliated database and coordination entities that now number well over 100. A detailed published map book that shows coordination boundaries for every part of the United States. A copy of the most recent quarterly listing of volunteer BAS frequency coordinators is attached, as Exhibit A to these comments.
  - 3b. Legal and technical support for local coordination entities.
  - 3c. Special legal and technical support for major sports and news events that will involve coordination.
  - 3d. Support for database administrators that includes a free license for an SBE-supported compiled database program.
  - 3e. Representation on the National Frequency Coordination Council ("NFCC"), an All-Industry entity supported by SBE, major group owners and networks, and the National Association of Broadcasters ("NAB").
  - 3f. Input and feedback from local database/coordination entities to the SBE FCC Liaison Committee

- 3g. On-line advice and feedback via the SBE web site.
- 4. By 1983, SBE viewed support of volunteer Part 74 coordination as one of its basic and essential, services. This sense of "service-out-of-need" stemmed from diminishing expertise and support from traditional sources. In other words, SBE stepped in to fill a vacuum. Many radio and TV station engineering departments were already on the road to downsizing. Large headquarters engineering departments with Part 74 specialists within broadcast groups were on their way into the history books. Even the broadcast industry trade association's attention to Part 74 issues had diminished.
- 5. SBE is proud of its over 20 year support of this effort, made possible by countless hours donated by broadcast engineer volunteers over that time period that have managed the difficult daily problems associated with more Part 74 users than Part 74 channels. Without Part 74 spectrum, and spectrum efficiencies already in place, much of what the public hears and sees on their local radio and TV stations would simply not be possible. In television, broadcasters depend on both voice and video capabilities authorized under Part 74 that have made the phrase, "Film at Eleven" obsolete. Without the existing and highly efficient BAS infrastructure, live radio remote news, sports, and information programs would be at the mercy of, and subject to, high tariff installation costs and other significant limitations and liabilities of services provided by Common Carriers or private wire line providers. Not the least of which are operations at remote or inaccessible sites, without common carrier or other service, and on a moment's notice. These operations can last from minutes to days, depending on the situation.
- 6. As noted in Paragraph 12 of the NPRM, there are now more than 25,000 Part 74 auxiliary broadcast transmitters authorized to use the 455–456 MHz band in continental United States. These stations operate in a number of modes to fulfill a number of very different missions:
  - 6a. Simplex
  - 6b. Repeater
  - 6c. Mobile repeater
  - 6d. Transmitter telemetry return link ("TRL")

Authorized power levels range from 100 milliwatts to effective radiated power (ERP) levels in some repeater applications in excess of 1,000 Watts. However, most day-to-day Part 74

operations depend on voluntary agreement to use only enough power to accomplish the mission.

- 7. Over 100 local volunteer entities now either operate under the aegis of the SBE, or function as independent bodies who work closely with the SBE. As noted, the SBE publishes and distributes quarterly and nationwide (including a number of copies to the FCC) a comprehensive and ever-growing listing of local database and coordination contacts.
- 8. Since 1982, SBE National has amassed a comprehensive body of knowledge and data on all aspects of use of all Part 74 spectrum. SBE has filed several Petitions for Rulemaking and numerous Comments and Reply Comments affecting Part 74 BAS stations. The founding chairperson of SBE's National Coordination effort authored the first frequency coordination chapter for the Seventh Edition of the NAB *Engineering Handbook*, co-authored the rewrite for the Eighth Edition, and has participated in the writing of these instant comments. The integrity of Part 74 local databases maintained by both SBE-supported and stand-alone entities is generally conceded to exceed that of the FCC database itself.

### II. SBE Participation in Predecessor Rulemaking

- 9. In the predecessor rulemaking to this NPRM, IC Docket 94-31, concerning the U.S. position at the 1995 World Radiocommunication Conference ("WRC-95"), the issue of use of 455-456 MHz for MSS earth-to-space service and feeder uplinks was raised in late-filed "Joint-Supplemental Reply Comments" of eight non-voice non-geostationary ("NVNG") MSS proponents, consisting of CTA Commercial Systems, Inc., Leo One USA Corporation, Orbital Communications Corporation, Starsys Global Positioning, Inc., and Volunteers in Technical Assistance (the "Joint MSS Parties"). Those late-filed comments contained multiple incorrect claims regarding the 455-456 MHz BAS RPU band.
- 10. SBE drafted rebuttal comments, which are included here as Attachment B, but before these comments could be filed, the Commission issued its WRC-95 Report, on June 15, 1995.
- 11. In response to this denial of SBE of its rights under the Administrative Procedures Act ("APA") to file rebuttal comments to the late-filed Joint-Supplemental Reply Comments of the Joint MSS Parties, SBE then sent a letter to the Honorable William H. Jahn, Executive Director, WRC-95, United States Department of State, Washington, DC, on August 28, 1995.

The Joint MSS Parties filed its Joint-Supplemental Reply Comments on May 18, 1995, well after the April 14, 1995, deadline for Reply Comments to IC Docket 94-31. Nevertheless, the resulting June 15, 1995, FCC Report to IC Docket 94-31 accepted, and relied upon, these late-filed but un-rebutted MSS comments.

That letter is attached as Exhibit C to these comments. The SBE letter pointed out the lack of due process and the numerous and significant errors in the Joint-Supplemental Reply Comments of the Joint MSS Parties concerning claims about supposed light-channel loading the 455–456 MHz RPU band, and underestimation of the number of BAS RPU stations. Unfortunately, in a reply letter from Mr. Jahn, SBE was advised that it was too late for the State Department to do anything about SBE's concerns, since the FCC decision had already been made.

12. SBE now sees that the inaccurate characterizations of the 455–456 MHz BAS RPU band have again surfaced, and SBE is gratified to now be provided the opportunity to provide the Commission with accurate data regarding broadcasters' existing heavy use of these frequencies, as opposed to the unrealistically optimistic if not blatantly inaccurate earlier MSS characterizations, which the Commission has apparently accepted as the basis for this instant NPRM.

### III. SBE Disputes the FCC Characterization of 455 MHz BAS Band Use

- 13. SBE believes that the NPRM inaccurately characterizes use of the RPU band segment that many auxiliary broadcast remote pickup channels in the 455-456 MHz band tend to be used only intermittently. SBE challenges this statement and the FCC's methodology behind it. SBE respectfully asks the FCC to identify the information source and methodology behind its statement at Paragraph 12 of the NPRM.
- 14. SBE presents the following facts to counter the FCC's characterization:
  - 14a. The narrow band low power "P" channels near the edges of both the 455 MHz and 456 MHz demarcation points for this allocation are in use 24 hours a day, seven days a week to maintain positive telemetry control at many remote transmitter sites. Such positive control is mandated by the FCC's own Part 73 and Part 74 Rules. Typical systems utilize redundant transmitters and receivers to approach or exceed 99.9999% availability.
  - 14b. Many stations use this band in either a simplex mode or repeater mode paired with the 450-451 MHz RPU band segment for traffic reports, spot news coverage, as well as remote broadcasts lasting hours or days. Some systems utilize redundant transmitters and receivers to approach or exceed 99.9999% availability.

- 14c. Part 74 also permits use of RPU frequencies for emergency studio to transmitter links when disasters disable fixed point-to-point Part 74 950 MHz studio-to-transmitter ("STL") systems or wired STL services that are sometimes leased from Common Carriers.
- 14d. Indeed, the entire formats of many news and information stations throughout the country are predicated on Part 74 RPU band usage. For such stations, carrying out format demands for immediacy and rapid response to ever-changing local news events in both a timely and economically feasible manner without the availability of 450–451 and 455–456 MHz BAS channels would simply not be possible.
- 15. Paragraph 12 of the NPRM concludes that since many auxiliary broadcast remote pickup channels are used intermittently and Little LEO transmissions are currently limited to 450 millisecond bursts in the 148-149.9 MHz band, that Little LEO systems may be able to search the spectrum for unused channels and accomplish their communications without hindering the incumbent BAS users. The SBE needs more information and/or clarification before it can follow where the FCC is going in this matter. It seems that the NPRM is attempting to extrapolate operational facts from one band to another. This jump in logic is even challenged later in the NPRM, at Paragraph 15.
- 16. One problem SBE can see to such an approach would involve the common situation where a 5-Watt BAS "handie talkie" in a terrain-obstructed "hole" is relaying a report to a mountain top repeater. The Little LEO can't hear the handie-talkie, so it has no idea the frequency is in use, and it therefore applies what it mistakenly believes to be a Dynamic Channel Activity Assignment System ("DCAAS") channel assignment protocol (aka "polite protocol") transmission that nevertheless interferes with the repeater input signal, resulting in the abrupt and very much impolite end of communication from the handie-talkie. There is no way that interference will not occur with the current BAS repeater operation of high in/low out, and turning that standardized practice around would be a major expense (and also difficult, or impossible, at many communications sites due to receiver de-sensitization from other land mobile service transmitters).
- 17. Nor does SBE hold any credence in the effectiveness of spread-spectrum techniques, should the Little LEO proponents offer that approach as a magical cure-all in its Reply Comments. Spread-spectrum might well be a valid solution if Little LEOs get all the spectrum they would like in their wildest dreams, but to spread over only 1 MHz isn't going to result in interference-avoidance to terrestrial BAS stations, since the proposal is for earth-

to-space paths. If the allocation proposal was for space-to-earth, spread-spectrum techniques over only might 1 MHz might work, but even there SBE would want to see technical studies proving that spread-spectrum would be an effective mitigating technique.

- 18. The SBE vigorously challenges the term "intermittent use" as used in the NPRM. While some broadcast remote pickup transmissions may indeed last only for seconds and may have a low duty cycle, much longer and continuous program origination is more the rule than the exception. Transmissions can and do last for hours, days, weeks, or even months. Live programs are frequently scheduled to originate from sports venues, malls store fronts, and parking lots on a daily, weekly, or monthly basis. The reality of present-day 455–456 MHz RPU band use definitely does not fit the NPRM's perception of 455–456 MHz band utilization.
- 19. Broadcast stations searching for "vacant" RPU channels in a given market sometimes use scanners to monitor the 455–456 MHz band in their area before requesting frequency coordination with the local BAS volunteer frequency coordinating committee. This sometimes leads to problems, because such stations mistakenly think that because they do not hear anything on a particular channel in their area the channel is not utilized, but this is a misconception. Such monitoring will often not detect hand-held or other low-power transmitters in use, but a repeater site, or very tall antenna system, can hear such transmissions. For example, in the Dallas-Ft. Worth market, most RPU users have receive antennas located on 1,000-foot plus towers so as to better cover that large market. A 30-Watt radio in Ft. Worth can not be heard on a scanner in Dallas, but is fully usable on the air from a 1,500-foot AGL receive antenna site. Exhibit D provides a listing of the 450–455 MHz BAS users in the Dallas-Ft. Worth market, which is characteristic of the heavy use of this band by broadcasters and network entities in a major market.
- 20. Major sports and spot news events often bring local and national radio broadcasters into a venue for continuous transmissions lasting for indefinite periods of time. Examples of this range from the World Cup races held offshore in both the Atlantic and Pacific oceans, as well as uses specific to high school, college, amateur and professional sports.
- 21. Declared civil and weather emergencies such as the floods earlier this year in Montana, Hurricane Andrew, the Los Angeles Riots, and the 1994 Northridge Earthquake, *et cetera*, require both unlimited and unrestricted primary use by Part 73 licensees who provide the only emergency public information link between government and the public. Such use can and has extended to life safety communications in many situations.

- 22. The "intermittent use" statement in the NPRM is also flawed with another basic error in either logic or syntax, or both. While SBE grants that a Little LEO system might, in some cases, be able to use channels that are currently quiet, there would be no protection to "incumbent users" if a Little LEO signal begins to use a channel when it is "quiet" but then continues that use when an "incumbent user" needs the channel. There is immediacy for much Part 74 use for on-air programming during both normal times as well as declared civil/weather emergencies. Part 74 users cannot and should not have to tolerate awaiting the "release" of a channel by a Little LEO system, even if the technology to accomplish this existed. Since broadcasters must protect each other under Part 74 Rules, users cannot resort to uncoordinated "channel hopping" or to trunked systems that may be good solutions for less time and mission critical services.
- 23. Based on the NPRM, Little LEO system integrity may well be in jeopardy if "incumbent users," operating under current Part 74 Rules, begin a transmission while a Little LEO is using the channel. Some FCC staff and certain broadcast engineers may remember that Part 74 used to have a provision for "guard" receivers to prevent mutual repeater interference. This provision was eliminated when SBE and others proved to the Commission's satisfaction that "guard" receivers can never really provide true mutual protection.<sup>2</sup> It was also proved that "guard" receivers could and did hinder critical and emergency communications through normal operation, or if they malfunctioned. Lastly, "guard" receivers unnecessarily build up cost and complexity (and reduced the reliability) of already costly and complex systems.

### IV. SBE Concerns About Supposed "Primary" Status

24. SBE has serious concerns about primacy in the 455–456 MHz band. SBE notes that this NPRM has been carefully crafted to allay broadcasters' fears concerning impact on their primary band allocation under Part 74 of the FCC Rules; for example, proposed International Footnote S5.286B states

Stations in the mobile-satellite service in the bands  $455-456~\mathrm{MHz}$  and  $459-460~\mathrm{MHz}$  shall not cause harmful interference to, or claim protection from, stations in the fixed or mobile services.

However, SBE cannot help but be concerned that a door has been unlocked, if not left partially open. This door, if left ajar in a Final Report and Order, might well eliminate broadcaster primacy in this band segment the future. Once Little LEO operations begin, affected

Add citation (docket number, etc.).

broadcasters would have little recourse against a regulatory environment that is itself controlled by the very forces that have brought us spectrum re-farming and auctions.

25. SBE must place in the record its more than 20 years of volunteer data base information and facilitating the sharing/coordination process invested in the only significant RPU band segments broadcasters hold on a primary basis. SBE respectfully submits that even the FCC must rely on SBE data and experience in this band since all other sources of information are either incomplete, inaccurate, or both.

### V. Technical Questions and Issues Raised in the Notice

26. In Paragraph 14 of the NPRM, the FCC notes that WRC-95 itself said that

WRC-95 concluded that additional analysis is necessary. Specifically, WRC-95 acknowledged the demand for additional NVNG MSS spectrum, but it noted that spectrum below 1 GHz is extensively used by many services and that new technologies of some radio services, especially within the terrestrial mobile and broadcasting services, may have an impact on the sharing possibilities.

SBE would like to change the word "may" in that statement to "will certainly," absent long term guarantees that SBE feels are not likely to be crafted into a Final Report and Order on this matter.

- 27. SBE is also concerned with the potential loss of 5 MHz repeater split operation between the 450–451 MHz and 455–456 MHz bands. Much more study is necessary to prove to SBE's satisfaction that there will be little or no impact on "incumbent users" that would preclude repeater operations that are vital in large areas where terrain prevents direct line-of-sight operations. SBE wonders how a Final Report & Order could proceed without such study being on the record.
- 28. In Paragraph 15 of the NPRM the FCC notes that the frequency sharing studies between NVNG MSS and land mobile users did not specifically focus on 455–456 MHz. SBE concurs with this FCC observation and raises its own concerns given the unique nature of most part 74 operations.
- 29. SBE believes that International Working Group 2A ("IWG-2A") conclusions are indeed in part based on "theoretical assumptions such as low traffic level mobile incumbent usage" and that the DCAAS channel assignment protocol which is an underlying assumption for IWG-2A may not be extended to 455–456 MHz without formal testing. Indeed, SBE believes that once real-world conditions that exist in the 455–456 RPU band become widely

known as a result of this NPRM, the entire assumption for shared use by Little LEOs will fall apart like a house of cards. SBE submits the SCFCC 450 MHz database as Attachment C to these Comments in support of this position.

30. Again at Paragraph 15 of the NPRM, the Commission states that the issue of spectrum sharing between Little LEO operations and incumbent operations in the 455–456 MHz as well as 459–460 MHz bands are "complex" and will be thoroughly explored in a future, separate proceeding that will focus on developing appropriate service and licensing rules. To SBE, this sounds like the sharing proposal in this NPRM is a foregone conclusion, rather than an honest technical inquiry into the risks and feasibility of a sharing proposal. SBE therefore trusts that this was simply unfortunate wording placed into the NPRM, and not the telegraphing of a charade rule making proceeding to provide lip-service compliance to the Commission's obligations under the Administrative Procedures Act.

### VI. Summary

- 31. The SBE overall response to the Commission's statement at Paragraph C15 of the NPRM, seeking of comments as to the existence of adequate capacity for sharing the 455–456 band is a resounding "NOT AT THIS TIME."
- 32. As SBE has attested to herein, the existing 450–451 MHz and 455–456 MHz bands are highly congested. In separate communications with the FCC over the past 20 years, the SBE, SCFCC, and other parties have attempted to identify other parts of the spectrum where compatible sharing would allow more radio broadcasters to accomplish more high-quality RPU transmissions. The SBE respectfully places on the record the need for additional RPU spectrum available to broadcasters under Part 74, as opposed to the diminution of an already heavily-used 455–456 MHz RPU band. Radio broadcasters need either an additional 200 to 300 kHz allocation nationwide on a primary or secondary basis to support the wide range of radio and television uses and formats that have no other alternatives but Part 74 spectrum. Radio broadcasters will specifically also need this expanded allocation for more high-quality RPU in the next 5 years as the industry advances towards a digital radio service.
- 33. To use a phrase in the NPRM, SBE believes that effective development of a viable Little LEO service must be accomplished without "constraining the development of incumbent operations." To do other than this will impair both "incumbent operations," and the efficacy of the Little LEO system itself. This should be a major concern for not only the FCC and the SBE, but also for stock and stake holders in Little LEO development. To date,

there are no adequate and cost effective technical means available that can protect the proposed Little LEO service from Part 74 "incumbent user" interference.

34. SBE believes that if interference issues are resolved in favor of Little LEO operations, broadcasters might well lose up to 50% of vital UHF RPU capacity and 100% of vital UHF repeater capability. Without this repeater capability, Part 74 UHF operations in hilly or mountainous regions would become cost-prohibitive, if not impossible. To paraphrase an old adage, Little LEO proponents should be careful what they ask for because they just might get it. There is too much a stake here for this important new wireless communications service to risk unpredictable service interruptions from "incumbent users" or outright failure because the technical facts were not studied, ignored, or both. As NASA now knows after the Hubble telescope incident, it is both difficult and costly to perform orbital service calls to fix a design flaw.

### **List of Figures**

- The following figures or exhibits have been prepared as a part of these 35. ET Docket 97-214 comments:
- Attachment A: Most recent quarterly listing of SBE-affiliated BAS volunteer 1. frequency coordinators
- Attachment B: Never-filed draft SBE Reply Comments rebutting late-filed MSS 2. "Joint Supplemental Reply Comments"
- Copy of August 28, 1995, SBE letter to State Department, 3. Attachment C: concerning WRC-95 and 455-456 MHz BAS RPU frequencies
- Attachment D: SCFCC list of 455-456 MHz BAS users 4.
- Attachment E: List of 455-456 MHz BAS users in the Dallas-Ft. Worth market. 5.

Respectfully submitted,

Society of Broadcast Engineers, Inc.

By

Edward Miller, CPBH

President

By

Dane E. Ericksen, P.E., CSRE, CSTE

Chairman, SBE FCC Liaison Committee

By

Christopher D. Imlay, Its Counsel

December 1, 1997

Booth, Freret, Imlay & Tepper 5101 Wisconsin Avenue, NW, Suite 307 Washington, D.C. 20016 202/686-9600

# Attachment A: Quarterly Listing of SBE-Affiliated Frequency Coordinators

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FREQUENCY COORDINATO

As Compiled by the SOCIETY OF BROADCAST ENGINEERS, INC. As of October 1, 1997

Page 1

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Version: Oct.-.

CORRECTIONS APPEAR AS	CORRECTIONS	(bold)	_						
STATE/AREA	COORDINATOR	PHONE	STATION	ADDRESS	CITY	ZIP	CHP	FAX	E-MAIL
ALABAMA									
BIRMINGHAM	FRANK GIARDINA	205-945-4646	WAPIWJOXWZZR	244 GOODWIN CREST DR #300	BIRMINGHAM	35209		205-945-3999	
MONTGOMERY	LARRY WILKINS	334-240-9274	WLWI AM/FM	1 COMMERCE STREET	MONTGOMERY	36104		334-240-9219	wwilkins@aunetwork.com
HUNTSVILLE	DON RODEN JR.	205-539-8411		1701 MONTE SANO BLVD	HUNTSVILLE	35801		205-539-8489	donroden@hiwaay.net
MOBILE	NONE ON RECORD								
ALASKA									
AIRBANKS ONLY	ERIC NICHOLS	907-488-2216	KJNP	PO BOX O	NORTH POLE	99705		907-488-5246	
ALASKA-RADIO	DEREK EDMONDSON	907-562-3401		1991 FYFE CIRCLE	ANCHORAGE	99507	89		
ALASKA-TV	FRANK MENGEL	907-563-7070	KAKM-TV	3877 UNIVERSITY AVE.	ANCHORAGE	99508	89	907-273-9192	
VRIZONA									
ARIZONA	KARL VOSS	602-261-6191	KPNX	1101 N. CENTRAL	PHOENIX	85004	9	602-261-6181	kvoss@kpnx.com
RKANSAS	<u> </u>								
T. SMITH	LARRY DUNCAN	501-783-3131	KFSM-TV	P.O. BOX 369	FORT SMITH	72902			larryd@aol.com
LITTLE ROCK	MICHAEL CLAY	501-376-1111		P O. BOX 269	LITTLE ROCK	72203		501-376-3719	
CALIFORNIA									
I, Cal. Freq. Coord.									ncfcc@kumr.1ns.com
SF/SAN JOSE 2Ghz Dn	BILL RUCK	415-995-6969	KFOG/KNBR	55 HAWTHORNE ST.	SAN FRANCISCO	94105		415-995-6968	bruck@knbr.com
SF/SAN JOSE 2Ghz Up	DON SHARP	415-561-8996						415-561-8136	
SACRAMENTO 2Ghz Up	FRED LINDSAY	916-441-2345	KXTV	P O. BOX 10	SACRAMENTO	95812		916-441-3145	
ACRAMENTO 2Ghz Dn	MARK STENNETT	916-929-5325	KFBK/KGBY	1440 ETHAN WAY	SACRAMENTO	95825		916-922-9921	
SALINAS/MONTEREY	KARL KAUFFMAN	408-422-3500	KCBA	1550 MOFFET ST.	SALINAS	93905		408-422-9365	
SALINAS/MONT. ALT.	JANICE CLARICE	408-422-3500	KCBA	1550 MOFFET ST.	SALINAS	93905		408-422-9365	
AR NORTH	TERRY GREEN	707-826-3979	KHSU	HUMBOLDT STATE UNIV.	ARCATA	95521		707-826-6082	
RESNO 1Ghz Dn	RANDY STOVER	209-226-0341		4691 N. HARRISON	FRESNO	93704		209-226-3076	
RESNO 1Ghz Up	JEFF JORDAN	209-442-1170	T	2541 BEVERLY	CLOVIS	93611		209-233-5844	
SAN JOAQUIN VALLEY	JERRY MOORE	209-571-0449						209-571-0676	
SAN DIEGO	JOHN WEIGAND	619-628-0220	KSWB	1696 FRONTAGE RD.	CHULA VISTA	91911		619-575-8849	
SAN DIEGO	JOHN WEIGAND	619-628-0220	KSWB	1696 FRONTAGE RD	CHULA VISTA	91911		619-575-8849	
SAN DIEGO 1 Ghz Dn	JOHN BARCROFT	619-292-1360	KGBKPOP	7150 ENGINEER ROAD	SAN DIEGO	92111		619-571-6069	
S. CAL EXCEPT S. DIEGO	HOWARD FINE	213-962-7841	S.C.F.C.C	P.O. BOX 93906	LOS ANGELES	90093		213-962-1790	howard-fine@klcs pbs.org
CANADA	RON AMÉRO	MANAGER, FREG	DUENCY MANAGEME	NT & LICENSING					
	SPECTRUM MANAGEMENT OF	ERATIONS - DEPA	RTMENT OF COMMU	NICATIONS					
	300 SLATER STREET								
OLORADO									
BULLETIN BOARD		303-340-2053							
VESTERN SLOPE	C NORMAN PRICE	970-241-5776	KPRN-FM	414 MAIN STREET	GRAND JUNCTION	81501		970-245-8176	
RONT RANGE	JOHN HILLYER	303-798-170C						303-730-6101	
CONNECTICUT	<u> </u>								
HARTFORD	JOHN RAMSEY	860-768-4703	WWUH-FM	200 BLOOMFIELD AVE	W HARTFORD	06117	14	860-768-5702	
DELAWARE									
DELAWARE	STEPHEN GANSKY	215-672-7080	TOTAL RF	2049 STOUT DR., BLDG 2A	WARMINSTER, PA	18974		215-672-8049	sgansky@totalrf.com

Send Additional Information and/or Corrections to PAUL LENTZ, 5034 Silica Drive. Sylvania, OH 43560 (419) 882-5906, E-mail. 105331 2575@compuserve.com



### FREQUENCY COORDINATORS

As Compiled by the SOCIETY OF BROADCAST ENGINEERS, INC. As of October 1, 1997



Page 2

Attachment A:

Quarterly Listing of SBE-Affiliated Frequency Coordinators

SBE Comments: ET Docket 97-214

CORRECTIONS APPEAR AS CORRECTIONS

Version: Oct.-97

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STATE/AREA	COORDINATOR	PHONE	STATION	ADDRESS	CITY	ZIP	CHP	FAX	E-MAIL
DC									
WASHINGTON	BOB DENNY	202-452-9323	DENNY & ASSOC	P O BOX 19329	WASH, DC	20036	37	202-452-5610	rdenny@denny.com
FLORIDA									
CENTRAL	MAX KIRKLAND	407-446-0577	TRIBUNE NETWK	633 N. ORANGE AVE.	ORLANDO	32801		407-420-6176	
MIAMI	RICHARD EDWARDS	954-757-8668	TOWER AMERICA	10100 W. SAMPLE RD. STE 329	CORAL SPRINGS	33065		954-757-9994	retowercom@aol.com
BULLETIN BOARD	MIAMI AREA	954-846-0802							
NORTHEAST	CARY MARTIN	904-393-9863	WJXT-TV	P.O. BOX 5270	JACKSONVILLE	32207	7	904-393-9861	
PALM BEACH-RADIO	JIM JOHNSON	561-625-5900	JOHNSON ASSOC	10144 SEAGRAPE WAY	PALM BCH GRONS	33418	88	561-625-0800	
PALM BEACH-TV	GEORGE DANNER	407-844-1212	WPEC	P.O. BOX 24612	W PALM BEACH	33416	88	407-881-0741	
TAMPA	RALPH BEAVER	813-262-8612	MEDIA ALERT	5510 GRAY ST., SUITE 38	TAMPA	33609	39	813-281-0745	bevo@media-alert.com
NORTHERN AREA	CLYDE SCOTT	912-890-2506	EME COMM	293 JC SAUNDERS RD.	MOULTRIE, GA	31768		912-985-0864	cscott@surfsouth.com
TALLAHASSEE	NONE ON RECORD								
GAINESVILLE	EDWARD A SLIMAK	352-392-5551	WUFT-TV	WEIMER HALL, RM 1012	GAINESVILLE	32611		352-392-5731	eslimak@jou.ufl.edu
FT. MYERS-TV	G. WAYNE PHILLIPS	941-939-6299	WBBH-TV_	P.O. BOX 7578	FT. MYERS	33911		941-939-6209	wphillips@water net
FT. MYERS-RADIO	AL BAXA	941-793-1011	WAVV	11800 TAMIAMI TRAIL E.	NAPLES	33962		941-793-7000	103240 140@compuserve.com
GEORGIA									
ATLANTA	TOM GIGLIO	404-261-2970	WQXIWSTR	3350 PEACHTREE RD.	ATLANTA	30326	5	404-365-9026	tgiglio@ipc.com
SOUTH GEORGIA	CLYDE SCOTT	912-890-2506	EME COMM	293 JC SAUNDERS RD	MOULTRIE	31768		912-985-0864	cscott@surfsouth.com
HAWAII									
HAWAII	CRAIG MILLER	808-943-1715	KHNL	2365 HOOMAHA WAY	HONOLULU	96822	63	808-941-7908	cvmiller@lava net
IDAHO									
NORTHERN	GREG SCHWARZ	509-324-4000	KXLY-TV	WEST 500 BOONE AVE.	SPOKANE, WA	99201	21	509-328-5274	
NAMPA	ANDREW SUK	208-467-3301	KIVI-TV	1866 E. CHISHOLM DR.	NAMPA	83697	115	208-381-6680	asuk@rmci net
SOUTHEAST	DAVID TURNMIRE	208-236-2857	KISU-TV	PO BOX 8111	POCATELLO	83209		208-236-2848	
ILLINOIS									
CHICAGO RADIO	MIKE McCARTHY	312-329-9002	WLIT-FM	150 N. MICHIGAN AVE.	CHICAGO	60601	26	847-439-1464	mikem@mre.com
CHICAGO TV ONLY	CRAIG STROM	312-565-8090	WFLD-TV	205 N. MICHIGAN AVE.	CHICAGO	60601	26	312-819-0385	76623 1551@compuserve.com
QUAD CITIES	RICK SERRE	309-764-8868	WOAD	3003 PARK 16TH ST.	MOLINE	61265	65	309-764-5763	rwserre@wqad com
SPRINGFIELD	BRUCE HARROLD	217-787-4756	BEATTY TV	RR 1 BOX 183	TAYLORVILLE	62568	49	217-787-4865	
ROCKFORD	DOUG WHITE	816-234-7306		P.O. BOX 404	BYRON	61010	96	815-282-7779	dwhiteamfm@aol.com
EVANSVILLE, IN	FRANK HERTEL	812-963-3294	NEWMAN-KEES ENG	8611 SLATE RD.	EVANSVILLE, IN	47720	121	812-963-3294	fertel@aol.com
INDIANA									
CENTRAL	DAVE FORT	317-940-5964	WTBU-TV	2835 N. ILLINOIS ST.	INDIANAPOLIS	46208	25	317-940-5971	fort@butler.edu
MOTOR CITY/SPDWY	TOM ALLEBRANDI	317-846-3724	<b></b>	APRIL & MAY/JULY & AUGUST 317-484	-6460, OTHER MONTHS CA	LL 317-846-3	724		tma@worldnet att net
S. BEND/SW MICH	CARROLL DeGROFF	219-287-3029	<u> </u>	1910 E. BOWMAN	SOUTH BEND	46613	30		73177 266@compuserve.com
EVANSVILLE	FRANK HERTEL	812-963-3294	NEWMAN KEES ENG	8611 SLATE RD.	EVANSVILLE	47720	121	812-963-3294	fertel@aol.com
BULLETIN BOARD	INDIANAPOLIS	317-535-1643	<u> </u>		<u> </u>	<u> </u>			
IOWA									
IOWA	MIKE STOVER	515-294-6376	WOI AM/FM	RM 216J COMM BLDG	AMES	50011		515-294-1544	mstover@iastate edu

Send Additional Information and/or Corrections to PAUL LENTZ, 5034 Silica Dr.

na, OH 43560 (419) 882-5906, E-mail 105331 2575@compuserve.com



# FREQUENCY COORDINAT As Compiled by the SOCIETY OF BROADCAST ENGINEERS, INC.

As of October 1, 1997

SBE

Page 3

Attachment A:

Quarterly Listing of SBE-Affiliated Frequency Coordinators

SBE Comments:

ET Docket 97-214

CORRECTIONS APPEAR AS CORRECTIONS

Version: Oct.-..

(bold)

STATE/AREA	COORDINATOR	PHONE	STATION	ADDRESS	CITY	ZIP	CHP	FAX	E-MAIL
KANSAS									
ALL EXCEPT KS CITY	LLOYD MINTZMYER	913-483-6990	KOOD-TV	BOX 9	BUNKER HILL	67626	3	913-483-4605	Hoyd_mintzmyer@kood.pbs.org
(Kansas City listed under Mis	souri)					1			
KENTUCKY									
LOUISVILLE	ERIC BERGMAN	502-582-7840	WHAS-TV	BOX 1084	LOUISVILLE	40201		502-582-7279	
	ERIC BERGMAN	502-582-7763	ALTERNATE NO.			Ī			
CENTRAL	JIM PLUMMER	606-258-7178	KY ED TV	600 COOPER DR	LEXINGTON	40502	35	606-258-7390	
PADUCAH	JIM FRANKLIN	502-442-8214	WPSD-TV	BOX 1197	PADUCAH	42001		502-442-8214	
SOUTHEAST	None on Record								
BOWLING GREEN	MICHAEL GOLCHERT	502-726-3555	WBVR RADIO	P.O. BOX 298	RUSSELLVILLE	42276	103	502-726-3095	golchert@mindspring.com
LOUISIANA									
BATON ROUGE-TV	KENT HATFIELD	504-767-5660	LA Public Bdcst	7860 ANSELMO LANE	BATON ROUGE	70810		504-767-4277	
BATON ROUGE-RADIO	M PATTON ASSOCIATES	504-292-4189		12563 PARKCIEL AVE.	BATON ROUGE	70816		504-293-7754	
NEW ORLEANS	FRED BARRETT	504-486-6161	WVUE-TV	1025 S. JEFFERSON DAVIS	NEW ORLEANS	70125		504-483-1212	
NORTHEAST 1Ghz Dn	MARK WILSON	318-342-5560	KEDMIKNLU	225 STUBBS HALL-NLU	MONROE	71209		318-342-5570	tvwilson@alpha.nlu.edu
NORTHEAST 1Ghz Up	JERRY HARKINS	316-388-8888	KNOE	1400 OLIVER ROAD	MONROE	71201		318-322-8774	
SHREVEPORT	RICK BENSON	318-688-1130	KEELIKITT	BOX 20007	SHREVEPORT	71120	44	318-687-8574	
LAFAYETTE	MAC DULA	318-482-5787	KRVS-FM	P.O. BOX 42171	LAFAYETTE	70504		318-231-6101	mac.dula@ust.edu
MAINE									
MAINE	BOB MULLANE	207-874-6570	MAINE PBS	P.O. BOX 1628	PORTLAND	04104		207-761-0318	
(ALTERNATE)	GIL MAXWELL	207-941-1010	MAINE PBS	65 TEXAS AVENUE	BANGOR	04401		207-942-2857	
MARYLAND									
BALTIMORE	J. ROWLAND KRAFT JR	410-338-6647	WBAL-TV	3800 HOOPER AVE	BALTIMORE	21211		410-296-4850	
MASSACHUSETTS									
BOSTON, RHODE ISL.	JOE SWEENEY	617-787-6868	WABU-TV	1660 SOLDIERS FIELD RD	BOSTON	02135	11	617-787-7425	
	JOE SWEENEY	617-562-4320	ALTERNATE NO.						
MICHIGAN									
LANSING	LARRY A ESTLACK	517-887-8088	WLAJ-TV	5815 S PENNSYLVANIA	LANSING	48911	91	517-887-0077	
UPPER	LARRY A ESTLACK	517-887-8088	WLAJ-TV	5815 S. PENNSYLVANIA	LANSING	48911	91	517-887-0077	
GRAND RAPIDS/W.MI	TOM BOSSCHER	616-942-1500	WCSG	1159 EAST BELTLINE	GRAND RAPIDS	49505		616-942-7078	lbosscher@cornerstone edu
SOUTHWEST	CARROLL DeGROFF	219-287-3029	ļ	1910 E. BOWMAN	SOUTH BEND, IN	46613			
DETROIT	RUSS HARBAUGH	810-656-5959	MEDIA CONTROL	150 ELIZABETH LANE	ROCHESTER	48307		810-656-5906	rharbaughj@aol.com
MINNESOTA		· · · · · · · · · · · · · · · · · · ·							
MINNESOTA	NONE ON RECORD			<b></b>					
		<del></del>							
BULLETIN BOARD	NONE ON RECORD	1	<u></u>						
MISSISSIPPI									
MISSISSIPPI	TOM BONDURANT	601-922-1607	WAPT-TV	P O BOX 10297	JACKSON	39289		601-922-1663	tomb@misnet.com

Send Additional Information and/or Corrections to PAUL LENTZ, 5034 Silica Drive, Sylvania, OH 43560 (419) 882-5906 E-mail 105331 2575@compuserve.com



### **FREQUENCY COORDINATORS**

Version: Oct.-97

### As Compiled by the SOCIETY OF BROADCAST ENGINEERS, INC.

Attachment A:

Quarterly Listing of SBE-Affiliated Frequency Coordinators

SBE Comments: ET Docket 97-214

		As of October 1, 1997									
CORRECTIONS APPEAR AS	CORRECTIONS	(bold)									
STATE/AREA	COORDINATOR	PHONE	STATION	ADDRESS	CITY	ZIP	CHP	FAX	E-MAIL		
MISSOURI											
KANSAS CITY/PART	LLOYD COLLINS	913-362-7282		8210 W 57TH TERRACE	MERRIAM	_66202	59	913-362-7287			
ST. LOUIS	SAM CAPUTA	314-878-1040	WKKXWKBQ	111 WESTPORT PLAZA #1000	ST. LOUIS	63146	55	314-878-1564	scaputa@mo.net		
BULLETIN BOARD	SAM CAPUTA	314-692-5134	T			L			scaputa@mo net		
MONTANA											
MONTANA	DOUG DRADER	406-243-5206	U OF MT PAR-TV		MISSOULA	59812		406-243-3299	ddrader@selway umt edu		
MONTANA ALTERNATE	SKIP SOUCHARD	406-761-2800	KXGF	P.O. BOX 62	ULM	59485			skipis@mtn-webtech.com		
NEBRASKA											
MIDWESTERN	JERRY FUEHRER	308-743-2494	KHGI-TV	P.O BOX 220	KEARNEY	68848	87	308-743-2644			
EASTERN AREA	WILLIAM SEIER	402-479-1433	KEZGKLIN	P O BOX 30181	LINCOLN	68503	74	402-479-1411			
NEVADA											
SOUTHERN NEVADA	JACK SMITH	702-435-5555	KVVU-TV	25 TV 5 WAY	HENDERSON	89014		702-451-4220			
NORTHERN	JACK PARKER	702-858-8888	KOLO-TV	4850 AMPERE DRIVE	RENO	89502		702-858-8855			
(ALTERNATE)	MIKE WEAVER	702-329-9261	KOZZKHIT	2900 SUTRO	RENO	89512		702-323-1450			
BULLETIN BOARD	JACK SMITH	702-898-9684									
NEW HAMPSHIRE											
NEW HAMPSHIRE	BILL BUMPUS	603-868-1100	WENH PBS	P O BOX 1100	DURHAM	03824		603-868-7552	bill@nhptv11.unh.edu		
NEW JERSEY				_							
SEE NEW YORK AREA											
SOUTHERN	STEPHEN GANSKY	215-672-7080	TOTAL RF	2049 STOUT DR., BLG.2A	WARMINSTER, PA	18974		215-672-8049	sgansky@totairf.com		
NEW MEXICO											
NEW MEXICO	AL DEME	505-277-2121	KNME TV	1130 UNIVERSITY BLVD NE	ALBUQUERQUE	87102		505-277-6904	apdeme@ix netcom com		
NEW YORK											
CENTRAL	GEORGE BRAUNGARD	315-425-5555	WTVH-TV	980 JAMES STREET	SYRACUSE	13203	22	315-425-5513			
NYC 1Ghz Up	WILLIAM MIERISCH	201-288-5550	WNJU-TV	47 INDUSTRIAL AVE	TETERBORO, NJ	07608		201-288-0129			
ROCHESTER	JONATHAN SHEEHAN	716-232-3700	WUHF-TV	360 EAST AVENUE	ROCHESTER	14601		716-846-4774	j.sheehan@stellar1.com		
NORTHEAST	None on Record										
ALBANY/SCHENECTADY	FRED LASS	518-346-6666	WRGB	1400 BALLTOWN RD	SCHENECTADY	12309	58	518-346-6249	fredlass@globalone net		
NYC 1Ghz Dn	WALTER SIDAS	212-975-1723	CBS, INC.	524 W 57TH ST	NEW YORK	10019	15	212-975-2657			
LONG ISLAND	JOHN CARACCIOLO	516-222-1103	WDRE-FM	1103 STEWART AVE.	GARDEN CITY	11530		516-228-9133			
LONG ISLAND ALT.	BOB WOLF	516-752-9311		107 ALDEN	WEST BABYLON	11704		516-845-7167			
BINGHAMTON'S CENT	GINO RICARDELLI	607-797-8142						607-770-8015			
BUFFALO	BILL LISK	716-840-7807	WKBW	7 BROADCAST PLAZA	BUFFALO	14202		716-842-1855			
NORTH CAROLINA											
GRNSBORO/HI POINT	ALLEN BOAZ	919-769-9689		263 ARCHIE YOKELEY RD	WINSTON-SALEM	27107		919-769-9689	allenboaz@compuserve.com		
RALEIGH/DURHAM	JIM DAVIS	919-684-6232	WXFC	118 MONTICELLO AVE.	DURHAM	27707	93	919-941-1074			
STATE 1Ghz Dn	GARY LIEBISCH	919-876-0674	WPTF/WQDR	3012 HIGHWOODS BLVD	RALEIGH	27604	93	919-876-5291	glieb@mindspring.com		
STATE 1Ghz Up	SAM GARFIELD	919-846-2976	TBC	P O BOX 97262	RALEIGH	27624		919-846-2976	garfield@vnet net		
CHARLOTTE	STU ALBERT	704-527-4152	SUNBELT VIDEO	4205K STUART ANDREW	CHARLOTTE	28217		704-523-8459			
FAYETTEVILLE	VAN CLOUGH	910-486-6904	ВТМ	3685 METRIC DR	HOPE HILLS	28348		910-486-4609	btminc@apcnet.com		
NORTHWEST	TIM WARNER	704-258-1238		87 N LIBERTY ST	ASHEVILLE	28801	86	704-258-2809	twarner@wnc.com		

Send Additional Information and/or Corrections to PAUL LENTZ, 5034 Silica Dri

nia, OH 43560 (419) 882-5906 E-mail 105331 2575@compuserve.com



### FREQUENCY COORDINATO

Version: Oct.->,

As Compiled by the SOCIETY OF BROADCAST ENGINEERS, INC. As of October 1, 1997

Page 5

Attachment A:

Quarterly Listing of SBE-Affiliated Frequency Coordinators

SBE Comments: ET Docket 97-214

CORRECTIONS APPEAR AS CORRECTIONS

STATE/AREA	COORDINATOR	PHONE	STATION	ADDRESS	CITY	ZIP	CHP	FAX	E-MAIL.
BULLETIN BOARD									
NORTH DAKOTA									
NORTH DAKOTA	NONE ON RECORD								
OHIO									
COLUMBUS	GREG SAVOLDI	614-487-2485	WTVN	1301 DUBLIN ROAD	COLUMBUS	43215	52	614-487-2559	
EASTERN	TOM HAMILTON	614-374-9647	SECURITY ELEC	RT. 2 BOX 59A	LOWELL	45744		614-373-9390	sei@ee net
CLEVELAND	ED MILLER	216-431-5555	WEWS-TV	3001 EUCLID	CLEVELAND	44115	70	216-431-3641	miller@wews.com
CLEVELAND	MARK KRIEGER	216-642-5319	WGAR-FM	5001 ROCKSIDE RD	INDEPENDENCE	44131	70	216-328-9953	
MANSFIELD AREA	MARK HINER	614-397-1000	WMVO	P.O. BOX 348	MT. VERNON	43050		614-392-9300	
SOUTHEAST	RICK ERVIN	614-593-1113	WOUB-TV	9 SOUTH COLLEGE ST.	ATHENS	45701		614-593-0240	fervin1@ohiou.edu
OUTHWEST	TOM NORNHOLD	937-293-0107		2408 WEST AVE.	KETTERING	45419		937-293-0107	
TOLEDO	BILL ROSSINI	419-244-8321	WSPDWLQR	125 S. SUPERIOR	TOLEDO	43602	104	419-244-7631	ke8ep@ix.netcom.com
YOUNGSTOWN	WES BOYD	330-783-1000	WBBW	4040 SIMON ROAD	YOUNGSTOWN	44512		330-783-0060	
OKLAHOMA									
OK CITY-MW/TV	TED NEWCOMB	405-478-3000	косо-ту	P.O. BOX 14555	OKLAHOMA CITY	73113	85	405-475-5222	
OK CITY-RADIO	DENNIS ORCUTT	405-478-5104	KGML	P.O. BOX 14818	OKLAHOMA CITY	73113	85	405-478-0448	denniso@flash.net
TULSA 1Ghz Up	LARRY MILLER	918-445-9318	KTUL-TV	3200 S. 29TH W AVE	TULSA	74107		918-445-9316	
TULSA 1Ghz Dn	RICHARD HARDY	918-627-2937	HARDY PROD.	3239 S. 90TH E. AVE.	TULSA	74145	56	918-627-2328	
OREGON									
PORTLAND & SW WA	EVERETT HELM	503-231-4257	KATU-TV	P.O. BOX 2	PORTLAND	97207	16	503-231-4624	everetth@katu.com
PENNSYLVANIA									
CENTRAL	RICK MARKEY	717-393-5851	WGAL-TV	1300 COLUMBIA AVE.	LANCASTER	17603	41	717-393-3185	
ORTHEAST	JOE GLYNN	717-826-7144	WVIA-TV/FM	OLD BOSTON RD.	PITSON	18640		717-655-1180	
OUTHEAST	STEPHEN GANSKY	215-672-7080	TOTAL RF	2049 STOUT DR. BLG.2A	WARMINSTER	18974		215-672-8049	sgansky@totalrf.com
NORTH CENTRAL	CLIFFORD "SKIP" SMITH	717-323-5360	SMITH RADIO CO.	835 FIRST AVE.	WILLIAMSPORT	17701	2	717-323-6909	
SOUTH CENTRAL	MATT LIGHTNER	814-239-8323	LIGHTNER ELECT	RD #1 BOX 670	CLAYSBURG	16625		814-944-9456	mattn3kky@aol.com
HILADELPHIA	STEPHEN GANSKY	215-672-7080	TOTAL RF	2049 STOUT DR. BLG.2A	WARMINSTER	18974	18	215-672-8049	sgansky@totairf.com
RIE	DAN NUNGESSER	814-455-7575	WSEE-TV	1220 PEACH STREET	ERIE	16501		814-454-5541	
VESTERN	OTTO SCHELLIN	412-237-1184	WPXI-TV	11 TELEVISION HILL	PITTSBURGH	15214	20	412-323-8097	otto@wpxi.com
ALLENTOWN 1Ghz Dn	BILL LAKATAS	610-434-6221	HGF MEDIA	1444 HAMILTON ST.	ALLENTOWN	18102	120	610-434-8918	
ALLENTOWN 1Ghz Up	BARRY FISHER	610-797-4530	WFMZ-TV	EAST ROCK ROAD	ALLENTOWN	18103	120	610-791-3000	
PHILIPPINES									
PHILIPPINES	MARTIN FAUSTINO	<u> </u>	#6 ROSABEL ST.	MRV STA, LUCIA PASIG, MANILA			114		
PUERTO RICO									
PUERTO RICO	E RODRIGUEZ-VELEZ	787-878-1275	WMIA RADIO	BOX 1055	ARICIBO	00613		787-880-3026	
RHODE ISLAND									
RHODE ISLAND	None on Record		<u></u>						
SOUTH CAROLINA									
AUGUSTA/AIKEN	KEN FREEMAN	803-279-6610	l	1305 GEORGIA AVE	N AUGUSTA	29841		803-279-0220	
HARLESTON 1Ghz Dn	BRUCE ROBERTS	803-556-5660		#1 ORANGE GROVE ROAD	CHARLESTON	29407		803-763-0304	
CHARLESTON 1Ghz Up	JACK BECKNELL	803-723-8371	1	P O BOX 186	CHARLESTON	29402		803-723-0074	

Send Additional Information and/or Corrections to PAUL LENTZ, 5034 Silica Drive, Sylvania, OH 43560 (419) 882-5906, E-mail 105331 2575@compuserve.com



### FREQUENCY COORDINATORS As Compiled by the

SOCIETY OF BROADCAST ENGINEERS, INC. As of October 1, 1997



Attachment A:

Quarterly Listing of SBE-Affiliated Frequency Coordinators

SBE Comments: ET Docket 97-214

CORRECTIONS APPEAR AS: CORRECTIONS

Version: Oct.-97

STATE/AREA	COORDINATOR	PHONE	STATION	ADDRESS	CITY	ZIP	CHP	FAX	E-MAIL.
FLORENCE/GRAND STR	DOUG CARTER	803-393-6691	SC EDU. TV	1152 N MAIN	DARLINGTON	29540		803-393-6691	
GRNVILLE/SPARTNBRG	JERRY MASSEY	864-271-9200		505 RUTHERFORD ST	GREENVILLE	29602		864-242-1567	massey86@aol.com
MIDLANDS	FAYNE ANDERSON	803-791-1653		P O BOX 2522	COLUMBIA	29202			
SOUTH DAKOTA									
SOUTH DAKOTA	NONE ON RECORD								
TENNESSEE			[						
NASHVILLE-TV_	RANDY CAIN	615-871-6968	NASHVILLE NET	2806 OPRYLAND DR	NASHVILLE	37214	103	615-871-5947	
KNOXVILLE	FRANK FOLSOM	423-573-6171		P.O. BOX 20122	KNOXVILLE	37940	113		
MEMPHIS	PAT LANE	901-458-2521	WKNO	P.O. BOX 241880	MEMPHIS	38124	61	901-325-6505	
(ALTERNATE)	MICHAEL SCHWARTZ	901-726-0505	WMC-TV	1960 UNION AVE.	MEMPHIS	38104		901-276-7949	
NASHVILLE-RADIO	CLINTON HOOPER	615-259-4567	WJXAWRMX	504 ROSEDALE AVE.	NASHVILLE	37211	103	615-259-4594	
CLARKSVILLE	MICHAEL GOLCHERT	502-726-3555	WBVR	P.O. BOX 298	RUSSELLVILLE, KY	42276		502-726-3095	
TEXAS									
AUSTIN-TV	REED DAUGHTRY	512-451-1559	KVUE-TV	3201 STECK AVENUE	AUSTIN	78767	79	512-454-7482	
AUSTIN-RADIO	JIM HENKEL	512-908-4922	KAJZKLBJ	8309 NORTH 1-35	AUSTIN	78753	79	512-836-4063	
CORPUS CHRISTI-R/TV	STEVE WEST	512-886-6100	KRIS-TV	L	CORPUS CHRISTI	78403	29	512-887-6666	
DALLAS/FT. WORTH	COORD. COMMITTEE	L		http://www.sbe67.org			67		freqcord@sbe67.org
EAST	BUTCH ADAIR	903-510-7811	KTLV-TV	P.O. BOX 957	TYLER	75710	67	903-510-7847	badair@ktv.com
EL PASO 1Ghz Dn	DAVID L. STEWART	915-544-9797	KBNA	2211 E. MISSOURI	EL PASO	79903	<u> </u>	915-544-1247	71210.2074@compuserve com
EL PASO 1Ghz Up	ALGIE FELDER	915-851-3382	KPAS					915-851-4360	
HOUSTON-TV	DON SAENGER/R GOLDY	713-222-2222	KPRC-TV	P.O. BOX 2222	HOUSTON	77252	105	713-771-1939	
HOUSTON-RADIO	BILL CORDELL	713-789-5600	SPECTRUM ENG.	510 BERING DR. STE. 310	HOUSTON	77079	105	713-789-1313	bcordeli@electrotex.com
BULLETIN BOARD		713-284-1090		<u></u>					L
RIO GRANDE VALLEY	JOHN ROSS	210-544-1072	VALLEY BOCST	2 POMELOS LANE	BROWNSVILLE	78521		210-544-4598	<u></u>
SAN ANTONIO-RADIO	PAUL REYNOLDS	210-615-5427	KKYX/KCYY	8122 DATAPOINT #500	SAN ANTONIO	78229	69	210-615-5300	paul.reynolds@cox.com
SAN ANTONIO	HAROLD FRIESENHAHN	210-226-4444	KMOL-TV	P O BOX 2641	SAN ANTONIO	78229	69	210-223-1314	hfriesen@kmol.com
VICTORIA	None on Record		<u> </u>	<u> </u>					
WACO	KEN MUSGRAVE	817-776-1330	KWTX	P.O BOX 2636	WACO	76702		817-751-1088	
AMARILLO	DONALD FORD	806-371-5231	KACV-TV	P.O. BOX 447	AMARILLO	79718		806-371-5258	dhford@ipgate.actx.edu
BBS CHAPTER 67	JOHNNY STIGLER	FAX ONLY		<u> </u>	_ <u></u>	<u> </u>		214-353-5099	jstigler@wfaa.com
UTAH									
SALT LAKE CITY	JOHN DEHNEL	801-575-5555	KSL RADIO	BROADCAST HOUSE	SALT LAKE CITY	84110	62	801-575-7625	john dehnel@ks com
(ALTERNATE)	CHUCK CONDRON	801-580-3025		5906 S. RIVERPOINT CIR	MURRAY	84123		801-269-8595	apollo@aros net
BULLETIN BOARD	CHUCK CONDRON	801-266-2426	<u></u>						apollo@aros net
VERMONT						l			
VERMONT 2Ghz Dn	MARK HUTCHINS	802-258-4500	BDCST SVCS	P.O. BOX 6418	BRATTLEBORO	05302	Ļ	802-258-2500	radiotvwz@aol.com
VERMONT 2Ghz Up	TED TEFFNER	802-658-6300	WCAX-TV	P O BOX 608	BURLINGTON	05402		802-658-0529	teffner@wcax com
VIRGINIA				<u> </u>					
NORFOLK	SPERRY DAVIS	757-446-1000	WTKR	720 BOUSH ST	NORFOLK	23510	54	757-622-1113	sperry@pinn net
RICHMOND	ALLEN KASS	804-756-6481	WRVA Radio	200 N 22ND ST	RICHMOND	23223	60	804-755-6077	
ROANOKE	RONALD SMITH	540-344-0991	WBRA-TV	PO BOX 13246	ROANOKE	24032	L!	540-857-7205	

Send Additional Information and/or Corrections to PAUL LENTZ, 5034 Silica Dr.

на ОН 43560 (419) 882-\$906, E-mail 105331 2575@compuserve.com



## FREQUENCY COORDINA

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As Compiled by the SOCIETY OF BROADCAST ENGINEERS, INC.
As of October 1, 1997

SBE

Page /

Attachment A: Quarterly Listing of SBE-Affiliated Frequency Coordinators

SBE Comments:

ET Docket 97-214

CORRECTIONS APPEAR AS: CORRECTIONS

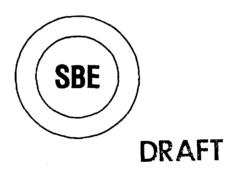
(bold)

STATE/AREA	COORDINATOR	PHONE	STATION	ADDRESS	CITY	ZIP	CHP	FAX	E-MAIL
NORTHWEST	LARRY RITCHIE, SR	540-459-8£10	WAZT-TV	123 COURT ST	WOODSTOCK	22664	78	540-459-5834	
CHESAPEAKE	SPERRY DAVIS	804-446-1000	WTKR	720 BOUSH ST	NORFOLK	23510	54		sperry@pinn net
WASHINGTON									
EASTERN	GREG SCHWARZ	509-324-4000	KXLY-TV	WEST 500 BOONE AVE	SPOKANE	99201	21	509-328-5274	
SEATTLE 2Ghz Dn	GEORGE BISSO	206-889-4772	Sanduskey Bdcst	11645 132ND CT NE	REDMOND	98052		206-889-4772	biggrizz@aol.com
	GEORGE BISSO	206-314-4018	DIGITAL PAGER						biggrizz@aol.com
SEATTLE	BUD ALGER	206-282-2202	KTZZ	945 DEXTER AVE. N	SEATTLE	98109		206-281-0207	
SOUTHWEST WA	EVERETT HELMS	503-231-4257	KATU TV	P.O BOX 2	PORTLAND, OR	97207		503-231-4624	
TRI-CITIES	NEIL BENNETT	509-735-8369	KVEW-TV	601 N EDISON	KENNEWICK	99336	51	509-735-7889	
YAKIMA	AARON WASILEWSKI	509-248-1460	TNJ BROCSTNG	P O BOX 1460	YAKIMA	98907		509-453-5550	5goodapples@geocities.com
WEST VIRGINIA									
WEST VIRGINIA	RANDY KERBAWY	304-877-5592	MIM _	P.O BOX 1127	BECKLEY	25802	115	304-877-5289	rkerbawy@juno.com
BECKLEY	LEON DRYE	304-255-1501						304-252-9797	
BECKLEY	CHARLES MARLOWE	304-253-7311						304-253-3466	1
WISCONSIN									
SOUTH/CENTRAL	TOM SMITH	608-263-2121	WHA-TV	821 UNIVERSITY AVE.	MADISON	53706	24	608-263-9763	smithtc@vilas.uwex.edu
MILWAUKEE	DAVID JANZER	414-476-4200	A TECH SVC	10010 W SCHLINGER	MILWAUKEE	53214		414-476-8417	djanzer@atswi.com
NORTHEAST 2Ghz Dn	PAT BERGER	414-725-4447	WROE Radio	P O BOX 1035	NEENAH	54957	80	414-725-0463	
WESTERN	MARK BURG	608-783-7573	WLAX-TV	N-5268 CLOVER CT.	ONALASKA	54650	112	608-781-1456	
NORTHEAST 2Ghz Up	JOE KAMENICK	715-845-4211	WSAW-TV	1114 GRAND AVE	WAUSAU	54403	80	715-845-2649	
WYOMING									
WYOMING	ROGER HICKS	307-856-6944	KCWC-TV	2660 PECK STREET	RIVERTON	82501		307-856-3893	rhicks@interserve1.cwc whech ex

# Attachment B: Never-filed SBE Draft Reply Comments Rebutting Claims in Late-Filed MSS Parties "Joint Supplemental Reply Comments"

Reply Comments of the Society of Broadcast Engineers, Inc.

IC Docket 94-31 Preparation for WRC-95



June 5, 1995

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SOCIETY OF BROADCAST ENGINEERS, INC. Indianapolis, Indiana



# Attachment B: Never-filed SBE Draft Reply Comments Rebutting Claims in Late-Filed MSS Parties "Joint Supplemental Reply Comments"

# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of Preparation for
International Telecommunication
Union World Radiocommunication
Conference

IC Docket No. 94-31

To: The Commission

DRAFT

### Reply Comments of the Society of Broadcast Engineers, Inc.

The Society of Broadcast Engineers, Incorporated (SBE), the national association of broadcast engineers and technical communications professionals, with more than 5,000 members in the United States, hereby respectfully submits its comments in the above-captioned Second Notice of Inquiry relating to the position of the United States at the upcoming World Radiocommunication Conference in Geneva, Switzerland, from October 23 to November 17, 1995 ("WRC-95").

### I. Response to the Late-Filed Supplemental Comments of Joint MSS Parties

- 1. Even though the reply comment deadline to IC Docket 94-31 closed on March 21, 1995, on May 18, 1995, the Joint MSS Parties (CTA Commercial Systems, Inc., E-Sat, Inc., Final Analysis Communication Services, Inc., GE American Communications, Inc., Leo One USA Corporation, Orbital Communications Corporation, Starsys Global Positioning, Inc., and Volunteers in Technical Assistance) filed "Joint Supplemental Reply Comments" proposing to share 450-451 MHz and 455-456 MHz Broadcast Auxiliary frequencies for MSS "feeder uplinks" and "service uplinks."
- 2. In response thereto, SBE respectfully requests that its comments be also accepted and entered into the record of this proceeding.

### II. Sharing of 450-451 and 455-456 MHz RPU Frequencies

3. The Joint MSS Parties allege that the 450–451 and 455–456 MHz Broadcast Auxiliary bands "level of usage is neither heavy nor continuous" and therefore are good candidates for spectrum sharing. SBE begs to differ with this characterization. The 450–451 and 455–456

950605 PAGE 1

SBE



# Attachment B: Never-filed SBE Draft Reply Comments Rebutting Claims in Late-Filed MSS Parties "Joint Supplemental Reply Comments"

SBE Reply Comments: IC Docket 94-31

MHz Broadcast Auxiliary bands are heavily used by radio stations. TV stations, and Broadcast Network entities. Incredibly, the Joint MSS Parties filing omitted one of the heaviest uses of 450 MHz Remote Pickup ("RPU") frequencies, namely traffic reporting. While SBE concedes that some 450 MHz Broadcast Auxiliary frequencies may not be continuously used, to claim that they are not heavily used is a gross mischaracterization.

- 4. The Joint MSS Parties state, at Appendix A, Page 3, "Many stations have substituted these bands with the use of alternate technologies, e.g., cellular telephone." This is only partially correct. Users of Broadcast Auxiliary RPU spectrum have augmented, not substituted, "alternate technologies," which SBE suggests means almost exclusively cellular telephones. The reason for this use of a significantly more expensive communications medium is the massive channel congestion that exists in the major radio and TV markets, especially during the morning and evening "drive" times.
- 5. To suggest that a frequency band must be both heavily used and continuously used before it should not be considered a candidate for sharing is disingenuous. By that logic most of our major highways in our major cities should be capable of absorbing much greater traffic, because, while they might be heavily used during rush-hour, they are not continuously used in that manner. Anyone who has had to regularly commute in rush-hour traffic can attest to the fallacy of that logic: it is the peak channel loading that determines whether a frequency band can be reasonably shared, and not its average loading. Indeed, SBE submits that the very time when RPU frequencies are most heavily loaded (weekdays) is exactly when MSS will be most in demand.
- 6. The Joint MSS Parties filing states that most 450 MHz RPU frequencies are in the form of 5 kHz wide "stackable" segments. This is incorrect. Although such a spectrum scheme was proposed in MM Docket 84-280, the effective date for the November 6, 1980, Report and Order to that docket was stayed until "the date specified in a future order to be issued by the Chief. Mass Media Bureau indicating that appropriate computer programs are available for implementing the new rules." Such an order has never been issued, and therefore the "old" channel widths of 10, 25, 50, and 100 kHz are still in effect.
- 7. The Joint Parties argue that because MSS uplinks would use dynamic channel avoidance talso known as "polite protocol," where the polite protocol station first monitors a channel, and only transmits if the channel is found to be momentarily vacant), low duty cycle, brief message duration, and geographical separation, there would be little likelihood for interference. Yet nowhere in the filing are numbers placed on these nebulous terms. SBE

950605 PAGE 2

SBE

# Attachment B: Never-filed SBE Draft Reply Comments Rebutting Claims in Late-Filed MSS Parties "Joint Supplemental Reply Comments"

SBE Reply Comments: IC Docket 94-31



believes that the Commission must reject the Joint MSS Parties' proposal until specific numbers are attached for "low duty cycle," "brief message duration," and "geographical separation." For example, if a duty cycle of no more than 1%, message durations of no greater than 500 mSec, and geographical separations of at least 80 kilometers from all RPU base stations were proposed, then SBE would probably not object to sharing 450 MHz RPU frequencies with MSS space-to-earth transmissions, so long as existing RPU stations would be treated as primary (i.e., MSS uplinks could not cause interference to existing RPU stations, and would have to accept interference from existing RPU stations), and new RPU stations would be co-equal with MSS uplink stations.

### III. Summary

8. SBE objects to this sneaky, non-timely filing by the Joint MSS Parties. To attempt to shape the U.S. Position at WRC-95 at this late date in a filing almost three months after the Reply Comment deadline is a disservice to the concept of "fair play" and to the requirements of the Administrative Procedures Act. Nevertheless, if the Commission accepts the late-filed Joint MSS Parties' comments, SBE requests that the Commission similarly consider its comments, so that a balanced record in this matter results.

Respectfully submitted,

Society of Broadcast Engineers, Inc.

By Charles W. Kelly, Jr., President

By Dane E. Ericksen, P.E., CSRE, CSTE Chairman, SBE FCC Liaison Committee

By Christopher D. Imlay, Its Counsel

SBE

950605 PAGE 3



Booth, Freret & Imlay 1233 20th Street, Suite 204 Washington, D.C. 20036

(202) 296-9100

### Attachment C: SBE Correspondence with U.S. State Department



SOCIETY OF BROADCAST ENGINEERS, INC.

8445 Keystone Crossing, Suite 140 Indianapolis, Indiana 46240 Phone (317) 253-1640 FAX (317) 253-0418 BBS (317) 253-7555

OFFICERS

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August 29, 1995

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AFFILIATED WITH: AND SIGN CHAINS AND FOR A MINE COLUMN TO A MODE COLUMN TO A MODE COLUMN TO A MODE A MO Via Facsimile and Hand Delivery (202) 647-7407

Honorable William H. Jahn Executive Director, WRC-95 United States Department of State Washington, D.C. 20520

> Re: United States Agenda for WRC-95; Allocation of 455-456 MHz to Mobile Satellite Services.

Dear Mr. Jahn:

The undersigned serves as President of the Society of Broadcast Engineers, Incorporated (SEE). SBE is the national, non-profit organization representing the interests of broadcast and communications engineers and technical operating personnel. SBE represents the interests of more than six thousand communications engineers, and is vitally interested in the spectrum allocation decisions of the United States in international conferences, to the extent that they have significant impact on domestic allocations, and hence the industry in which our membership functions.

SBE is very much concerned about one aspect of the FCC's decision in its Report (FCC 95-256, IC Docket No. 94-31, released June 15, 1995) in preparation for the WRC-95 Conference, both with respect to the substance thereof and the process by which the decision was made. This pertains to the proposal to allocate 455-456 MHz for Service Links in the Earth-to-space direction for Worldwide MSS below 1 GHz. It is the strongly held opinion of SEE that this decision was made without due consideration for the incumbent licensees in the Broadcast Auxiliary Service, and was arrived at without adequate opportunity for public notice and comment. We request that the United States delegation visit this matter in advance of the Conference in October, and to consider an alternative frequency band for MSS service uplinks other than broadcast auxiliary spectrum.